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FITCH EVEN TABIN & FLANNERY
135 SOUTH LASALLE STREET
SUITE 900
CHICAGO IL 60603-4277

EXAMINER
COLEMAN, E

ART UNIT	PAPER NUMBER
1624	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 09/242,540	Applicant(s) BIEDERMANN et al.
	Examiner Brenda Coleman	Group Art Unit 1624

- Responsive to communication(s) filed on May 22, 2000.
- This action is **FINAL**.
- Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- Claim(s) 1-41 is/are pending in the application.
- Of the above, claim(s) 41 is/are withdrawn from consideration.
- Claim(s) _____ is/are allowed.
- Claim(s) 1-40 is/are rejected.
- Claim(s) _____ is/are objected to.
- Claims _____ are subject to restriction or election requirement.

Application Papers

- See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- The drawing(s) filed on _____ is/are objected to by the Examiner.
- The proposed drawing correction, filed on _____ is approved disapproved.
- The specification is objected to by the Examiner.
- The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- All Some* None of the CERTIFIED copies of the priority documents have been
- received.
 - received in Application No. (Series Code/Serial Number) _____.
 - received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- Notice of References Cited, PTO-892
- Information Disclosure Statement(s), PTO-1449, Paper No(s). 8
- Interview Summary, PTO-413
- Notice of Draftsperson's Patent Drawing Review, PTO-948
- Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Claims 1-41 are pending in the application.

Election/Restriction

1. Applicant's election of Group II in Paper No. 11 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claim 41 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b) as being drawn to a non-elected invention. Election was made **without** traverse in Paper No. 11.
3. Claims 1-8 and 14-40 are rejected under judicially created doctrine as being drawn to an improper Markush group. The recited compounds, while possessing a common utility, differ widely in structure and are not art-recognized equivalents and are thus, independently distinct for the reasons set forth in the restriction requirement. The Markush group represented by the term E has variably different definitions, rendering the claims clearly improper

Deletion of non-elected subject matter would overcome this rejection.

Information Disclosure Statement

4. One of the journal articles, i.e. R. Fischer, "Allgemeine Pathologie und Pathologische Anatomie" is missing the publication date which is required for citation upon allowance of the application. It is requested that the publication date be provided to complete the record.

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Specification

5. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

6. Any non-provisional application claiming the benefit of one or more prior filed copending nonprovisional applications or international applications designating the United States of America must contain or be amended to contain in the first sentence of the specification following the title a reference to each such prior application, identifying it by application number (consisting of the series code and serial number) or international application number and international filing date and indicating the relationship of the applications. Cross - references to other related applications may be made when appropriate.

“This application is a national stage entry under 35 U.S.C. § 371 of PCT/EP97/03245, filed June 20, 1997.” is suggested.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-10 and 12-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The following reasons apply:

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- a) A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 1 recites the broad recitation alkyl, alkenyl, alkinyl, hydroxyalkyl, alkoxy, alkenyloxy, alkinyloxy, alkanoyloxy, alkoxycarbonyloxy, alkylthio, alkenylthio, alkinylthio, cycloalkyl, cycloalkyloxy, cycloalkylthio, alkoxycarbonyl, alkylaminocarbonyl and/or dialkylaminocarbonyl, and the claim also recites especially C₁-C₆-alkyl, C₃-C₆-alkenyl, C₃-C₆-alkinyl, C₁-C₆-hydroxyalkyl, C₁-C₆-alkoxy, C₃-C₆-alkenyloxy, C₃-C₆-alkinyloxy, C₁-C₇-alkanoyloxy, C₂-C₇-aloxycarbonyloxy, C₁-C₆-alkylthio, C₃-C₆-alkenylthio, C₃-C₆-alkinylthio, C₃-C₈-cycloalkyl, C₃-C₈-cycloalkyloxy, C₃-C₈-cycloalkylthio, C₂-C₇-

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alkoxycarbonyl, C₂-C₇-alkylaminocarbonyl and/or C₃-C₁₃-dialkylaminocarbonyl which is the narrower statement of the range/limitation. See the definitions of R¹, R⁶, R², R⁸, R³, R⁴, A, D, R⁹, R¹⁰, R¹¹, R¹², R¹³, R¹⁴, R¹⁵, Ar¹ and Ar².

- b) Claims 1-4 (and claims dependent thereon) are vague and indefinite in that it is not known what is meant by a C₁ alkanoyloxy in the definition of R¹ and R², since at least two carbon atoms are required.
- c) Claim 1 is vague and indefinite in that it is not known what is meant by the substituent C₁-C₆-hdroxyalkyl.
- d) Claim 1 is vague and indefinite in that the list given for the variable R¹ does not indicate that the list is for R¹, i.e. there is no verb.
- e) Claims 1, 2 and 4 (and claims dependent thereon) are vague and indefinite in that the list of substituents for the variable A is not in the alternative.
- f) Claims 1 and 2 (and claims dependent thereon) are vague and indefinite in that it is not known what is meant by a C₁ acyl in the definition of R⁹, since at least two carbon atoms are required.
- g) Claims 1, 2 and 4-6 (and claims dependent thereon) are vague and indefinite in that it is not known what is meant by formulae E1 and E2 where (D) and (G) are bonded to the ring.

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- h) Claims 1, 2 and 4 (and claims dependent thereon) are vague and indefinite in that the definition of the variables R¹² and R¹⁴ list a Markush group where there is no indication of the end of the grouping. An "and" before the last group is suggested.
- i) Claim 1 is vague and indefinite in that the list of substituents for the aryl residues and/or aromatic ring systems includes alkoxy, substituted entirely or partially by fluorine which is embraced by substituted alkoxy, and thus results in double inclusion. See Ex parte White 127 USPQ 261.
- j) Claims 1, 2, 4 and 8 (and claims dependent thereon) are vague and indefinite in that it is not known what is meant by a C₁ alkoxycarbonyl in the definition of the substituents for the aryl residues and/or aromatic ring systems, since at least two carbon atoms are required.
- k) Claims 1 and 2 (and claims dependent thereon) are vague and indefinite in that it is not known what is meant by part of the excluded species, i.e. piridyl.
- l) Claim 2 (and claims dependent thereon) is vague and indefinite in that it is not known what is meant by C₂-C₁₀-alkenylene, which is optionally substituted once or **twich**.
- m) A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent

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Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 3 (and claims dependent thereon) recites the broad recitation C₁-C₆-alkyl, and the claim also recites **preferably** a methyl-, ethyl-, propyl-, isopropyl-, butyl-, isobutyl-, etc. which is the narrower statement of the range/limitation. See also the definitions of C₃-C₆-alkenyl, C₃-C₆-alkinyl, C₃-C₈-cycloalkyl, C₁-C₆-alkoxy, C₃-C₆-alkenyloxy, C₃-C₆-alkinyloxy, C₃-C₈-cycloalkylthio, C₃-C₈-cycloalkenylthio, C₃-C₈-cycloalkinylthio, C₂-C₇-alkylaminocarbonyl, C₃-C₁₃-dialkylaminocarbonyl, C₁-C₆-alkansulfonyl and **anellated bi- and tricyclic aromatic or partially hydrated carbocycl[i]c ring systems.**

- n) Claim 3 (and claims dependent thereon) is vague and indefinite in that the definition of C₁-C₆-alkyl includes two substituents which are not C₁-C₆-alkyl but a C₄ and C₅-cycloalkyl.

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- o) Regarding claim 3 (and claims dependent thereon), the phrase "for example" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d). **See the definitions of alkylene, alkenylene, alkinylene, C₁-C₆-alkoxy, C₃-C₆-alkenyloxy, C₃-C₆-alkinyloxy, anellated bi- and tricyclic aromatic or partially hydrated carbocycl[i]c ring systems, anellated bi- and tricyclische aromatic or partially hydrated heterocyclic ring systems, saturated and unsaturated monocyclic, four- to eight-membered heterocycles and saturated or unsaturated bi- or tricyclic, anellated or bridged heterocycles.**
- p) A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38

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(Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 3 (and claims dependent thereon) recites the broad recitation C₁-C₆-hydroxyalkyl, and the claim also recites especially hydroxymethyl- and hydroxyethyl- which is the narrower statement of the range/limitation. See also the definitions of C₁-C₆-alkylthio, C₃-C₆-alkenylthio, C₃-C₆-alkinylthio, C₁-C₇-alkanoyloxy, C₂-C₇-alkoxycarbonyl, C₂-C₇-alkoxycarbonyloxy, C₁-C₆-alkylamino, di-(C₁-C₆-alkyl)amino, C₁-C₆-acyl, saturated five- to seven-membered heterocycles and monocyclic aromatic five- or six-membered heterocycles.

- q) Claim 3 (and claims dependent thereon) is vague and indefinite in that one of the moieties for the definition of saturated five- to seven-membered heterocycles includes Piperidinyl which starts with a capital letter indicating the beginning of the claim which is not so.
- r) Claim 3 (and claims dependent thereon) is vague and indefinite in that it is not known what is meant by tricyclische in the definition of anellated bi- and tricyclische aromatic or partially hydrated heterocyclic ring systems.
- s) Regarding claim 3 (and claims dependent thereon), the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). See the last paragraph of claim 3.

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- t) Regarding claim 3 (and claims dependent thereon), the phrase "for example" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d). See the last paragraph of claim 3.
- u) Regarding claim 3 (and claims dependent thereon), the phrase "are preferred" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d). See the last paragraph of claim 3.
- v) Claims 4 and 5 (and claims dependent thereon) are vague and indefinite in that the list of substituents for the variable D is not in the alternative.
- w) Claim 5 (and claims dependent thereon) recites the limitation " C_2-C_6 -alkylene, wherein a methylene unit can be isostERICALLY replaced by O, S, CO or SO_2 , and the isostERIC substitute, with the exception of =CO cannot be adjacent to the amide group" in the definition of A. There is insufficient antecedent basis for this limitation in the claim.
- x) Claim 5 (and claims dependent thereon) is vague and indefinite in that it is not known what is meant by the substituent on the C_1-C_8 -alkylene being **once twice**.
- y) Claim 5 (and claims dependent thereon) is vague and indefinite in that one of the moieties for the definition of $-NR^{12}R^{14}$ includes (5H)-Octahydrodibenzazepine

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which starts with a capital letter indicating the beginning of the claim which is not so.

- z) Claim 5 (and claims dependent thereon) is vague and indefinite in that one of the moieties for the definition of R¹⁵ includes C₃-C₈-Cycloalkyl which starts with a capital letter indicating the beginning of the claim which is not so.
- aa) Claims 5 and 7 (and claims dependent thereon) are vague and indefinite in that it is not known what is meant by "can carry" in the definition of R¹⁵.
- ab) Claims 5 and 7 (and claims dependent thereon) are vague and indefinite in that it is not known what is meant by a C₁ alkoxy carbonyl in the definition of R¹⁵, since at least two carbon atoms are required.
- ac) Claim 6 (and claims dependent thereon) is vague and indefinite in that it is not known what is meant by "fluorineenyl" or "oxodihydrothienobenzothiepinyldihydrodibenzothiepinyl" in the definition of R¹². See the fifth and last lines of page 196.
- ad) Claims 6 and 7 (and claims dependent thereon) recite the limitation "wherein in formula (I) the formula (G2b)" in the definition of R¹⁴. There is insufficient antecedent basis for this limitation in the claim. Formula (G2b) does not appear in formula (I).

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- ae) Claim 6 (and claims dependent thereon) is vague and indefinite in that one of the moieties for the definition of R¹⁴ includes Octahydroazocine which starts with a capital letter indicating the beginning of the claim which is not so.
- af) Claim 7 (and claims dependent thereon) recites the limitation "C₂-C₄-alkylene" in the definition of A. There is insufficient antecedent basis for this limitation in the claim.
- ag) Claim 8 (and claims dependent thereon) recites the limitation "ethenylene(vinylene) or 1,3-butadienylene" in the definition of A. There is insufficient antecedent basis for this limitation in the claim.
- ah) Claim 8 (and claims dependent thereon) is vague and indefinite in that it is not known what is meant by the definition of A where vinylene follows ethenylene in parentheses.
- ai) Claim 8 (and claims dependent thereon) is vague and indefinite in that the Markush grouping for the variable G has an "or" just before dihydribenzocycloheptenyl, indicating the end of the Markush grouping which is not so.
- aj) Claim 8 (and claims dependent thereon) recites the limitation "indolinyl-1-carbonyl and tetrahydrobenzo[b]azepinyl-N-carbonyl" in the definition of G. There is insufficient antecedent basis for this limitation in the claim.

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- ak) Claim 10 recites the limitation "pentadienoic" in the second and fifth species on page 204 and the first species on page 205. There is insufficient antecedent basis for this limitation in the claim.
- al) Claim 10 recites the limitation "(9-oxo-9H-fluoro-4-yl-carbonyl)" in the second species on page 205. There is insufficient antecedent basis for this limitation in the claim.
- am) Claim 12 recites the limitation "heptyl" in the first species. There is insufficient antecedent basis for this limitation in the claim.
- an) Claim 12 recites the limitation "octyl" in the second species. There is insufficient antecedent basis for this limitation in the claim.
- ao) Claim 12 recites the limitation "piperidin-4-yloxy" in the third and fourth species. There is insufficient antecedent basis for this limitation in the claim.
- ap) Claim 13 recites the limitation "pentadienoic" in the first, second, third and fourth species. There is insufficient antecedent basis for this limitation in the claim.
- aq) Claim 14 (and claims dependent thereon) is vague and indefinite in that it is not clear from which claim 14 is meant to depend since it is dependent upon claim 13 in the second line, however, claim 13 is a species claim. It is also dependent upon claims 1-8 in fifth line of page 207 and again in the ninth line as well as dependent upon claims 1-7 in the 13-14 lines of page 207, the seventh line of page 209 and

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again in the first line of page 210. Clarification is required. Additionally, a claim which depends on more than one claim must be in the alternative.

- ar) Claim 14 (and claims dependent thereon) is vague and indefinite in that the definitions of R¹, R², R³, A and k "have the meaning given above", however, they are not defined within the claim. Proper direction to the definition of R¹, R², R³, A and k is required.
- as) Claim 14 (and claims dependent thereon) recites the limitation "reactive derivatives" in the second line of page 207. There is insufficient antecedent basis for this limitation in the claim.
- at) Claim 14 (and claims dependent thereon) is vague and indefinite in that it is not known what is meant by "suitable nucleofuge".
- au) Regarding claim 14, (and claims dependent thereon) the phrase "for example" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d). See lines 2 and 3 on page 208. See also lines 3, 6, 16 and 23 on page 210.
- av) Regarding claim 14 (and claims dependent thereon), the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). See line 2 on page 208. See also lines 3-5, 7, 16 and 22-25 on page 210.

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- aw) Claim 14 (and claims dependent thereon) is vague and indefinite in that the definition of G indicates that it "represents an acyl, carbamoyl, sulfonyl or a phosphinoyl residue according to the above definition", however, they are not defined within the claim. Proper direction to the definition of G is required.
- ax) Claim 14 (and claims dependent thereon) is vague and indefinite in that it is not known what is meant by the phrase "according to definition" in the definition of G on page 208. What definition?
- ay) A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 14 (and claims dependent thereon) recites the broad

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recitation acyl- and/or sulfonyl halides, and the claim also recites **especially** acyl- and/or sulfonyl chlorides which is the narrower statement of the range/limitation.

See line 15 on page 208. See also line 18 on page 210.

- az) A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 14 (and claims dependent thereon) recites the broad recitation carboxylic acids and/or sulfonic acids, and the claim also recites carbamoyl halides and/or phosphinic acids are used as **preferred** derivatives which is the narrower statement of the range/limitation. See the sixth line from the

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bottom of page 208 and the tenth line on page 209. See also **preferably** in lines 3, 9 and 26 on page 210.

- ba) Claim 14 (and claims dependent thereon) is vague and indefinite in that the definition of R⁴ is "according to the above definition", however, R⁴ is not defined within the claim. See line 11 on page 210. See also line 14 on page 210 where R⁴ is "according to definition".
- bb) Claim 14 (and claims dependent thereon) is vague and indefinite in that it is not known what is meant by "absolute", inert solvent.
- bc) Claim 14 (and claims dependent thereon) is vague and indefinite in that formamide is not an aprotic solvent.
- bd) A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex*

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parte Steigewald, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 15 (and claims dependent thereon) recites the broad recitation acid halides, and the claim also recites especially acid chloride which is the narrower statement of the range/limitation. See line 2 on page 211. See also lines 3, 16 and 20 on page 211 and line 9 on page 212.

- be) Regarding claim 15 (and claims dependent thereon), the phrase "for example" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d). See lines 7 and 8 on page 211 and line 2 on page 212.
- bf) Regarding claim 15 (and claims dependent thereon), the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). See lines 9-11, 13, 20 and 23-27 on page 211 and lines 1, 3 and 4 on page 212.
- bg) A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then

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narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 15 (and claims dependent thereon) recites the broad recitation suitable solvent, and the claim also recites **preferably** inert which is the narrower statement of the range/limitation. See line 23 on page 211. See also lines 9 and 10 on page 212.

- bh) Regarding claim 16, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). See lines 3, 6-8 and 12-13 on page 212.
- bi) Regarding claim 16, the phrase "for example" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d). See lines 4 and 10 on page 16.
- bj) A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent

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Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 16 recites the broad recitation temperatures can vary between 0°C and 180°C, and the claim also recites preferably between 20°C and 130°C which is the narrower statement of the range/limitation.

- bk) Claim 17 (and claims dependent thereon) recites compounds of the **general** formula I. Compounds refers to more than one, thus giving the impression of a mixture rather than a single compound. A formula is not general when all of the variables are defined. Deletion of "general" is suggested.
- bl) Claims 18 and 19 (and claims dependent thereon) are substantial duplicates of claim 17, as the only difference is a statement of intended use which is not given material weight. Note *In re Tuominen* 213 USPQ 89.
- bm) Claims 20 and 21 (and claims dependent thereon) provide for the use of the compounds of formula (I), but, since the claim does not set forth any steps

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involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

- bn) Claims 22-38 and 40 (and claims dependent thereon) are vague and indefinite in that the terminology “a medicament” does not clarify whether the claim is limited to a compound, composition, or even complex composition.
- bo) Claim 39 is vague and indefinite in that the terminology “a substance or substance mixture” does not clarify whether the claim is limited to a compound, composition, or even complex composition.

Claim Rejections - 35 USC § 101

8. Claims 20 and 21 (and claims dependent thereon) are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 20-21 and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Goto et al., EP 330 026. Goto teaches the compounds of the instant invention where A is ethylene; R⁴ is hydrogen; D is ethylene; E is piperidin-4-yl; and G is benzyl.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-8 and 14-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goto et al., EP 330 026. The generic structure of Goto encompasses the instantly claimed compounds (see Formula I, page 2) and for the same uses as claimed herein. Example 3 which anticipates the instant invention differs only in the nature of the R³, R² and n substituents. Page 2, lines 21-23 defines the substituent R² as a hydrogen atom, an optionally substituted hydrocarbon group or an optionally substituted acyl group; R³ as an optionally substituted hydrocarbon group; and n is an integer ranging from 2 to 6. Compounds of the instant invention are generically embraced by Goto in view of the interchange ability of the R², R³ and n substituents of the pyridine ring. Thus, one of ordinary skill in the art at the time the invention was made would have been motivated to select for example n = 6 and R³ is phenyl as well as other possibilities from the

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generically disclosed alternatives of the reference and in so doing obtain the instant compounds in view of the equivalency teachings outlined above.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claims 1-8 and 14-40 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 41-47 and 54-79 of copending Application No. 09/216,075. Although the conflicting claims are not identical, they are not patentably distinct from each other because U.S.S.N. 09/216,075 embraces the compounds of the instant invention.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

12. Claims 1-40 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 33-35 of copending Application No.

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09/216,482. Although the conflicting claims are not identical, they are not patentably distinct from each other because U.S.S.N. 09/216,482 embraces the compounds of the instant invention.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Objections

13. Claims 2 and 3 are objected to because of the following informalities:

- a) The definition of R¹⁰ and R¹¹ in claim 2 contains a typographical error in that there is a hyphen within the term “bi-cyclic”.
- b) The definition of anellated bi- and tricyclic aromatic or partially hydrated carbocycle ring systems in claim 3 contains a typographical error.
- c) The definition of R¹⁴ in claim 6 contains a typographical error in that there is a hyphen within the term “(10H)-dihydrodibenzo[b,f]oxaze-pine”.

Appropriate correction is required.

14. Claim 16 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim must be in the alternative. See MPEP § 608.01(n).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda Coleman whose telephone number is (703) 305-1880. The examiner can normally be reached on Monday thru Friday from 9:00 AM to 5:30 PM.

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The fax phone number for this Group is (703) 308-4734 for "unofficial" purposes and the actual number for **OFFICIAL** business is **308-4556**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1235.

*E Bernhardt (Acting
SPE)*
EMILY BERNHARDT
PRIMARY EXAMINER
GROUP 1200 1600

BC Brenda Coleman
July 3, 2000